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| EXAMINER |
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HO, ANDY

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2194

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/855,683

Applicant(s)

PHAM ET AL.

Examiner

Andy Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1,8-14,17-18,23-27,30-32,39-42,45-46,51-55,58-60,67-70,73-74,79-83,86-139 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8-14,17-18,23-27,30-32,39-42,45-46,51-55,58-60,67-70,73-74,79-83,86-139 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. In view of the appeal brief filed on 11/28/2006, PROSECUTION IS HEREBY REOPENED. Responsive to Applicant's arguments, new grounds of rejection are set forth below:

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1, 8-14, 17-18, 23-27, 30-32, 39-42, 45-46, 51-55, 58-60, 67-70, 73-74, 79-83 and 86-139 have been examined and are pending in the application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 60, 67-70, 73-74, 79-83, 86-87, 120-135 and 139 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims disclose, "computer program being stored on a propagated signal" wherein

propagated signal is non-statutory media which incapable of being touched or perceived absent the statutory medium through which they are conveyed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 8-14, 23-27, 30-32, 39-42, 51-55, 58-60, 67-70, 79-83, 86-87 and 137-139 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan U.S Patent No. 6,075,863 in view of Onosaka U.S Patent No. 5,961,608 and Perlman U.S Patent No. 6,023,585.

As to claim 1, Krishnan teaches a system for installing computer software components (applets, line 24 column 3) on a client device (device capable of performing user input and output functions, lines 40-43 column 2) for enabling connectivity (to connect a user computer to a remote computer, lines 34-35 column 1;... the communication link is not established until a secure communication is requested, wherein such secure communications involves applets..., lines 57-67 column 3;... a "timeout" indicates communication link is not established since the other modem does not recognize the negotiation sequence..., lines 1-20 column 4) to a host system (remote computer, line 35 column 1) by at least one hardware device (modem 24, Fig. 1), comprising

a receiving module (data port 16, line 44 column 2) that is structured and arranged to receive (exchange data between modem 10 and host computer 12, lines 44-45 column 2) a connectivity component (applets, line 24 column 3) that enables connectivity to a host system (remote computer, line 35 column 1) by at least one hardware device (modem 24, Fig. 1);

a detection module that is structured and arranged to detect whether installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component (applets, line 24 column 3) is needed to enable connectivity between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (remote computer, line 35 column 1) using a selected hardware device (modem 24, Fig. 1);

an installation module that is structured and arranged to install (download the newer applet from the remote modem, lines 35-36 column 4) the connectivity component (applets, line 24 column 3) when the connectivity component is needed (if the remote modem has the newer version, lines 33-34 column 4) to enable connectivity between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (remote computer, line 35 column 1) using the selected hardware device (modem 24, Fig. 1);

the detection module determines whether a connectivity component is stored locally (...if the versions are the same, then the negotiation is completed and processing continues at step 52. However, if the remote modem has a newer version of the applet, then at step 48 modem 10 downloads the newer applet from the remote modem..., lines

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32-36 column 4; ... any time a connection is established between modem 10 and a similar remote modem, the use of a data encryption applet may be negotiated. If the modems already contain the same version of the encryption applet then data transfers may begin. If, however, one of the modems lacks the encryption applet, or has an older, out-of-date version, the modems may negotiate to transfer the new version..., line 64 column 4 to line 3 column 5) that is needed to enable connectivity;

the receiving module receives (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from a remote server (host computer 12, line 45 column 2) when the detection module does not detect the connectivity component that is needed (the applet on the remote modem has the newer version, lines 29-36 column 4) to enable the connectivity;

the installation module installs the updated connectivity component received from the remote server (download the newer applet from the remote modem, lines 35-36 column 4).

Krishnan does not explicitly teach several different hardware devices and detecting a new hardware device.

Onosaka teaches a system for loading computer software components (modem driver for a selected modem, lines 29-33 column 4) on a client device (user device, lines 34-37 column 4) for enabling connectivity to a host system (access remote communication server, lines 49-55 column 4) by at least one (the current modem, lines 32-33 column 4) of several different hardware devices (removable card, internal

modem, external modem, lines 31-32 column 4); detecting a new hardware device (detect the device being connected, lines 30-31 column 2). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Krishnan reference to include the teachings of Onosaka reference because this gives the client computer the convenience of using a suitable modem from multiple modems to connect to a remote computer as disclosed by Onosaka (lines 29-37 column 4).

Perlman teaches a system for detecting new hardware devices (...at system initialization, the WebTV box 10 determines the topological configuration of the processing system. That is, the WebTV box 10 initiates the process of assigning a slot position to each peripheral device and determines the number of peripheral devices on the expansion bus 28..., lines 26-32 column 5) couple to a client system (WebTV system as a computer, lines 63-67 column 2) and loading device drivers for these devices from a server (...WebTV server 5 receives the device codes that were transmitted by the WebTV client 1 over the network. In step 605, in response to receiving the device codes, the WebTV server 5 automatically uses the received codes to reference the database to determine the appropriate device drivers for the particular peripheral devices 30 connected to the WebTV box 10. Once the appropriate drivers are identified, in step 606 the WebTV server 5 automatically downloads these device drivers to the WebTV client 1 over the network connection 29. In step 607, the WebTV box 10 receives and automatically installs the device drivers transmitted from the WebTV server 5..., lines 45-56 column 6). It would have been obvious at the time the

invention was made to a person of ordinary skill in the art to have modified Krishnan reference to include the teachings of Perlman reference because this allows the system to detect the new connected devices and downloading the appropriate software programs for these particular devices as disclosed by Perlman (lines 57-64 column 1).

As to claim 8, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing a device driver (the applets upgrade the modem control software, lines 34-41 column 5) to enable communications (to connect a user computer to a remote computer, lines 34-35 column 1) between computer software (data, line 44 column 2) at the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using the new hardware device (modem 24, Fig. 1) associated with the device driver (the modem control software, line 35 column 5).

As to claim 9, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing directly (directly executed by the processor of the communication device, lines 7-8 of abstract) with the selected hardware device (modem 24, Fig. 1) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using the hardware device (modem 24, Fig. 1).

As to claim 10, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes computer software that interfaces with a driver (the

applets upgrade the modem control software, lines 34-41 column 5) for the new hardware device (modem 24, Fig. 1) that is used to connect (to connect a user computer to a remote computer, lines 34-35 column 1) to the host system (host computer 12, line 45 column 2).

As to claim 11, Krishnan as modified does not explicitly teach the use of broadband connectivity component with a broadband communication device. Perlman teaches the use of external modem and its driver (lines 10-13). It would have been obvious to apply the teachings of Perlman to the system of Krishnan because this external modem and its driver could be a broadband communication device with a broadband connectivity component since such teaching is conventional and well known in the art.

As to claim 12, Krishnan as modified does not explicitly teach the use of DSL connectivity component with a DSL modem. Perlman teaches the use of external modem and its driver (lines 10-13). It would have been obvious to apply the teachings of Perlman to the system of Krishnan because this external modem and its driver could be a DSL modem with a DSL connectivity component since such teaching is conventional and well known in the art.

As to claim 13, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes a cable connectivity component (the applets upgrade the modem control software, lines 34-41 column 5) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to the host

system (host computer 12, line 45 column 2) using a cable modem (cable modem, line 42 column 6).

As to claim 14, Krishnan as modified does not explicitly teach the use of satellite connectivity component with a satellite modem. Perlman teaches the use of external modem and its driver (lines 10-13). It would have been obvious to apply the teachings of Perlman to the system of Krishnan because this external modem and its driver could be a satellite modem with a satellite connectivity component since such teaching is conventional and well known in the art.

As to claim 23, Pearlman further teaches the modules perform automatically without user intervention (not desirable to require a user input, lines 59-65 column 5). Note the discussion of claim 1 above for the reason of combining references.

As to claim 24, Krishnan as modified further teaches the connectivity component received (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) includes an updated version of a connectivity component stored (the newer version of the applet is cached and retained, lines 3-5 column 5) on the client device (device capable of performing user input and output functions, lines 40-43 column 2) before the connectivity component (applets, line 24 column 3) is installed by the installation module (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 25, Krishnan as modified further teaches comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the

newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 26, Krishnan as modified further teaches the receiving module is structured and arranged to receive version information (if the remote modem has a newer version, lines 33-34 column 4) from a remote server associated with a connectivity component; comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2); install the connectivity component (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 27, Krishnan as modified further teaches the receiving module is structured and arranged to receive (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from the remote server (host computer 12, line 45 column 2) when the detection module determines that the version information associated with the connectivity component stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2) is not correct when compared against the version information received from the remote server (determines if the applet on the remote modem has the newer version, lines 29-36 column 4).

As to claim 30, Krishnan as modified further teaches a host system receiving module receive a request (a message to the remote modem, line 3 column 4) to send a

connectivity component (applets, line 24 column 3) to a local client device; a host system installation module send the connectivity component to the local client device (download the newer applet from the remote modem, lines 35-36 column 4) for installation on the local client device in response to the request.

As to claim 31, Krishnan as modified further teaches a host system detection module that is structured and arranged to determine a version (the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component needed for installation (download the newer applet from the remote modem, lines 35-36 column 4) on the local client device.

As to claims 32, 39-42, 51-55 and 58-59, they are method claims of claims 1, 8-11, 23-27 and 30-31, respectively. Therefore, they are rejected for the same reasons as claims 1, 8-11, 23-27 and 30-31 above.

As to claims 60, 67-70, 79-83 and 86-87, they are computer program product claims of claims 1, 8-11, 23-27 and 30-31, respectively. Therefore, they are rejected for the same reasons as claims 1, 8-11, 23-27 and 30-31 above.

As to claim 137, Krishnan as modified further teaches the detection module detects a prior receipt of the connectivity component (lines 25-35 column 3).

As to claim 138, it is a method claim of claim 137. Therefore, it is rejected for the same reasons as claim 137 above.

As to claim 139, it is a computer program product claim of claim 137. Therefore, it is rejected for the same reasons as claim 137 above.

5. Claims 88-91, 93-94, 97, 99-108, 110-111, 114, 116-123, 125-126, 129 and 131-136 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Onosaka and Elg U.S Patent No. 6,694,354.

As to claim 88, Krishnan teaches a system for installing computer software components (applets, line 24 column 3) on a client device (device capable of performing user input and output functions, lines 40-43 column 2) for enabling connectivity (to connect a user computer to a remote computer, lines 34-35 column 1;... the communication link is not established until secure communication is requested, wherein such secure communications involves applets..., lines 57-67 column 3;... a "timeout" indicates communication link is not established since the other modem does not recognize the negotiation sequence..., lines 1-20 column 4) to a host system (remote computer, line 35 column 1) by at least one hardware device (modem 24, Fig. 1), comprising:

a receiving module (data port 16, line 44 column 2) that is structured and arranged to receive (exchange data between modem 10 and host computer 12, lines 44-45 column 2) multiple connectivity components (applets, line 24 column 3) that enable connectivity to a host system (to connect a user computer to a remote computer, lines 34-35 column 1) by at least one hardware device (modem 24, Fig. 1),

a detection module that is structured and arranged to detect whether installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of at least one of the connectivity components (applets, line 24 column 3) is needed to enable connectivity between the client device and the host system (to

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connect a user computer to a remote computer, lines 34-35 column 1) using a selected hardware device; and

an installation module that is structured and arranged to install the connectivity component (download the newer applet from the remote modem, lines 35-36 column 4) when the connectivity component is needed (if the remote modem has the newer version, lines 33-34 column 4) to enable connectivity between the client device and the host system using the selected hardware device.

Krishnan does not explicitly teach several different hardware devices, copy the connectivity components to the client device from a compact disk and store the connectivity components in a dormant state on the client device.

Onosaka teaches a system for loading computer software components (modem driver for a selected modem, lines 29-33 column 4) on a client device (user device, lines 34-37 column 4) for enabling connectivity to a host system (access remote communication server, lines 49-55 column 4) by at least one (the current modem, lines 32-33 column 4) of several different hardware devices (removable card, internal modem, external modem, lines 31-32 column 4); detecting a new hardware device (detect the device being connected, lines 30-31 column 2). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Krishnan reference to include the teachings of Onosaka reference because this gives the client computer the convenience of using a suitable modem from multiple modems to connect to a remote computer as disclosed by Onosaka (lines 29-37 column 4).

Elg teaches a system of installing drivers for devices within a system wherein the drivers being copied to the client device from a compact disk and stored in a dormant state on the client device (lines 15-35 column 1). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Krishnan reference to include the teachings of Elg reference because this allows the system to detect the new connected devices and downloading the appropriate software programs for these particular devices as disclosed by Elg (lines 15-35 column 1).

As to claim 89, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing a device driver (the applets upgrade the modem control software, lines 34-41 column 5) to enable communications (to connect a user computer to a remote computer, lines 34-35 column 1) between computer software (data, line 44 column 2) at the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using the new hardware device (modem 24, Fig. 1) associated with the device driver (the modem control software, line 35 column 5).

As to claim 90, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing directly (directly executed by the processor of the communication device, lines 7-8 of abstract) with the selected hardware device (modem 24, Fig. 1) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host

system (host computer 12, line 45 column 2) using the hardware device (modem 24, Fig. 1).

As to claim 91, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes computer software that interfaces with a driver (the applets upgrade the modem control software, lines 34-41 column 5) for the new hardware device (modem 24, Fig. 1) that is used to connect (to connect a user computer to a remote computer, lines 34-35 column 1) to the host system (host computer 12, line 45 column 2).

As to claim 93, Krishnan as modified further teaches the detection module is structured and arranged to detect whether the installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component (applets, line 24 column 3) is needed to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) in response to an input received from a user (send a message to the remote modem inquiring if the remote modem is Java enabled, lines 3-4 column 4) of the client device (device capable of performing user input and output functions, lines 40-43 column 2) requesting communications (to connect a user computer to a remote computer, lines 34-35 column 1) using the selected hardware device (modem 24, Fig. 1); and the installation module is structured and arranged to install (download the newer applet from the remote modem, lines 35-36 column 4) the connectivity component (applets, line 24 column 3)

when the connectivity component (applets, line 24 column 3) is needed (if the remote modem has the newer version, lines 33-34 column 4) based on the input (send a message to the remote modem inquiring if the remote modem is Java enabled, lines 3-4 column 4) from the user of the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 94, Krishnan as modified does not explicitly teach a request to change connectivity to the host system from a low-bandwidth connection type to a broadband connection type. Onosaka teaches request to change connectivity (user selects the communication devices, lines 27-28 column 2). Onosaka does not explicitly teach changing from a low-bandwidth to a broadband connection type. However, Onosaka teaches the system is using several types of modems and drivers (lines 29-37 column 4). Therefore one of ordinary skill in the art would conclude that these modems could include a low-bandwidth type and a broadband type since such teachings are conventional and well known in the art.

As to claim 97, Onosaka further teaches hardware device detector (detect the device being connected, lines 30-31 column 2). Note the discussion of claim 88 above for the reason of combining references.

As to claim 99, Krishnan as modified further teaches the connectivity component received (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) includes an updated version of a connectivity component stored (the newer version of the applet is cached and retained, lines 3-5 column 5) on the client device (device capable of performing user input and output functions, lines 40-43 column 2)

before the connectivity component (applets, line 24 column 3) is installed by the installation module (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 100, Krishnan as modified further teaches comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 101, Krishnan as modified further teaches the receiving module is structured and arranged to receive version information (if the remote modem has a newer version, lines 33-34 column 4) from a remote server associated with a connectivity component; comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2); install the connectivity component (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 102, Krishnan as modified further teaches the receiving module is structured and arranged to receive (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from the remote server (host computer 12, line 45 column 2) when the detection module determines that the version information associated with the connectivity component

stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2) is not correct when compared against the version information received from the remote server (determines if the applet on the remote modem has the newer version, lines 29-36 column 4).

As to claim 103, Krishnan as modified further teaches a host system receiving module receive a request (a message to the remote modem, line 3 column 4) to send a connectivity component (applets, line 24 column 3) to a local client device; a host system installation module send the connectivity component to the local client device (download the newer applet from the remote modem, lines 35-36 column 4) for installation on the local client device in response to the request.

As to claim 104, Krishnan as modified further teaches a host system detection module that is structured and arranged to determine a version (the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component needed for installation (download the newer applet from the remote modem, lines 35-36 column 4) on the local client device.

As to claims 105-108, 110-111, 114 and 116-119, they are method claims of claims 88-91, 93-4, 97, and 101-104, respectively. Therefore, they are rejected for the same reasons as claims 88-91, 93-4, 97, and 101-104 above.

As to claims 120-123, 125-126, 129 and 131-136, they are computer program product claims of claims 88-91, 93-94, 97 and 99-104, respectively. Therefore, they are rejected for the same reasons as claims 88-91, 93-94, 97 and 99-104 above.

6. Claims 92, 98, 109, 115, 124 and 130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Onosaka and Elg, and further in view of Pearl.

As to claim 92, Krishnan as modified does not explicitly teach the use of broadband connectivity component with a broadband communication device. Perlman teaches the use of external modem and its driver (lines 10-13). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Krishnan reference to include the teachings of Pearlman reference because this external modem and its driver could be a broadband communication device with a broadband connectivity component since such teaching is conventional and well known in the art.

As to claim 98, Pearlman further teaches the modules perform automatically without user intervention (not desirable to require a user input, lines 59-65 column 5). Note the discussion of claim 92 above for the reason of combining references.

As to claims 109 and 115, they are method claims of claims 92 and 98, respectively. Therefore, they are rejected for the same reasons as claims 92 and 98 above.

As to claims 124 and 130, they are computer program product claims of claims 92 and 98, respectively. Therefore, they are rejected for the same reasons as claims 92 and 98 above.

7. Claims 17-18, 45-46 and 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Onosaka and Pearlman, and further in view of Coutts U.S Patent No. 6,311,165.

As to claim 17, Krishnan as modified does not explicitly teach the installation module installs a list of programs needed to install the connectivity component. Coutts teaches a list of programs needed to install the driver (software modules, line 25 column 21). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Krishnan reference to include the teachings of Coutts reference because this reduces the client's memory space and increasing processing time as disclosed by Coutts (lines 10-54 column 3).

As to claim 18, Coutts further teaches sequential list of programs such that only one reboot of the client device is necessary to accomplish installation (simple boot code...downloading the current version of the application software, lines 41-52 column 9). Note the discussion of claim 17 above for the reason of combining references.

As to claims 45-46, they are method claims of claims 17-18, respectively. Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 73-74, they are computer program product claims of claims 17-18, respectively. Therefore, they are rejected for the same reasons as claims 17-18 above.

8. Claims 95-96, 112-113 and 127-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Onosaka and Elg, and further in view of Coutts.

As to claims 95-96, they are system claims of claims 17-18, respectively.

Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 112-113, they are method claims of claims 17-18, respectively.

Therefore, they are rejected for the same reasons as claims 17-18 above.

As to claims 127-128, they are computer program product claims of claims 17-18, respectively. Therefore, they are rejected for the same reasons as claims 17-18 above.

Response to Arguments

9. Applicant's arguments filed 11/28/2006 have been fully considered.

Applicant argued that Krishnan reference does not teach detecting whether installation of the connectivity component is needed to enable connectivity between the client device and the host system using the selected hardware device. More specifically, the applicant argued that in Krishnan, the connectivity between the client and the host system is already established. In response, new portions from Krishnan's specification are disclosed in the claim rejections above indicating that a communication link is not established until a secure communication is requested, wherein such secure communication involves applets (lines 57-67 column 3). Lines 1-20 column 4 further discloses a "timeout" indicating communication link is not established since the other modem does not recognize the negotiation sequence.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIM) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents
P.O Box 1450
Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (571) 273 - 8300.

Art Unit: 2194

- OFFICAL faxes must be signed and sent to (571) 273 - 8300.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H

February 26, 2007



WEI ZHEN
SUPERVISORY PATENT EXAMINER